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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT M. DUNN

Appeal 2009-013920
Application 09/918,576
Technology Center 3600

Decided: May 12, 2010

Before ANTON W. FETTING, BIBHU R. MOHANTY, and
KEVIN F. TURNER, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Final Rejection of claims 1-23¹. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM and enter NEW GROUNDS OF REJECTION UNDER 35 U.S.C. §101.²

THE INVENTION

Appellant's claimed invention relates to a method and program for providing a reusable calculation scale framework for determining weighted shipping charges, discounts and taxes in various commercial environments. The method defines a calculation rule and a set of commerce objects such as line items in invoices, purchase orders or records generated in connection with web-based transactions. (Abs.).

¹ An Order Remanding this Appeal for failing to Appeal pending claim 24 was mailed to Appellant on July 9, 2009. In the Order it was held that in appeals where rejected claims are expressly withdrawn, or are implicitly withdrawn by not presenting arguments in support of patentability, the Board will remand (or return) the application to the Examiner with instructions to cancel the expressly or implicitly withdrawn claims. *Ex Parte Ghuman*, 88 USPQ2d 1478, 1480 (BPAI 2008). See also *Manual of Patent Examining Procedure* (MPEP) § 1215.03 (8th ed. Rev. 6, Sept 2007). Accordingly, the Examiner cancelled claim 24 in a communication mailed Aug. 7, 2009. Thus, claims 1-23 are presently before us on this Appeal.

² Our decision will make reference to the Appellant's Substitute Appeal Brief ("App. Br.," filed Dec. 13, 2007) and Reply Brief ("Reply Br.," filed May 20, 2008), and the Examiner's Answer ("Ans.," mailed Mar. 21, 2008).

Independent claim 1, which is deemed to be representative, reads as follows:

1. A method of displaying a result to a user, the result being provided by a calculation scale framework for use in an electronic commerce environment comprising a computer network, the electronic commerce environment defining a calculation rule, and a set of commerce objects, the method comprising:

providing a calculation scale comprising calculation ranges, each said calculation range being either cumulative or non-cumulative and having an associated range start number, an optional currency attribute, which when present specifies the currency of the range start numbers, and an optional unit of measure attribute, which when present specifies the unit of measure for the range start numbers;

providing a calculation scale look up interface, a base monetary value, a result multiplier and a set of mathematical weights corresponding to the set of commerce objects;

providing a range look up result interface to return a calculation result;

providing a multiplication product of the calculation result and the result multiplier;

providing a total result, the total result being provided by adding the multiplication product to a previously determined sum of multiplication products when the calculation range is cumulative and by replacing the previously determined multiplication product when the calculation range is non-cumulative;

apportioning the total result to the set of commerce objects in proportion to the set of mathematical weights; and

displaying the apportioned result.

THE REJECTION

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Blinn et al.	6,058,373	May 2, 2000
Danford-Klein et al.	6,061,667	May 9, 2000

The Examiner rejected claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Danford-Klein and Blinn.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments that Appellant did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUE

Has Appellant shown that the Examiner erred in rejecting claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Danford-Klein and Blinn?

FINDINGS OF FACT

The record supports the following findings of fact (FF) by at least a preponderance of the evidence. *In re Caveney*, 761 F.2d 671, 674 (Fed. Cir. 1985) (explaining the general evidentiary standard for proceedings before the Office).

Specification

1. Appellant's Specification describes that in one embodiment "mathematical weights" are the shipping weights. (p. 9, ll. 13-15).

2. Appellant's Specification broadly describes their computer program to be directed to a "modulated carrier signal." (Spec. p. 13, ll. 14-16)

Danford-Klein

3. Danford-Klein is directed to an object-oriented rating engine operable to receive linehaul rating requests associated with the costs of a carrier contract. (col. 3, ll. 15-20).

4. Danford-Klein describes rating engines designed to process different rate structures which include geography matrices, mileage bands, weight bands and complex combinations of these matrices and bands. These base rating engines contain the actual price data used to calculate the price for linehaul service. (col. 12, l. 64-col. 13 l. 2).

5. Danford-Klein describes that price data are made up of an index type, origin/destination type or band type, a unit of measure, and effective dates. (col. 13, ll. 2-4).

6. Danford-Klein describes these rating engines are known as collective rating engines and include the selective, additive, multiplier, minimum, and maximum engines. (col. 13, ll. 6-8 and col. 16, ll. 16-26).

7. Danford-Klein describes these rating engines results can be designated as independent or cumulative. Independent means that each service is rated by itself. Cumulative means that all services of a specific service code must be rated cumulatively. (col. 20, ll. 57-65).

8. Danford-Klein describes an additive rating engine which adds its results and a multiplier rating engine which multiplies its results. (col. 16, ll. 16-26).

Blinn

9. Blinn is directed to an object-oriented electronic merchandising system which allows merchants to create electronic orders which are easily adaptable for different sales situations by allowing merchants to add sales information using key-value pairs. (Abs., col. 12, l. 66-col. 13, l. 3).

10. Blinn describes that the sales transaction information stored in the key-value pairs may include special shipping information, unique billing information, gift wrap information, etc. (col. 2, ll. 6-9).

11. Blinn describes computing the total charge for an order during the order total stage as the sum of the key-value pairs from the order pipeline. (col. 29, ll. 50-59).

12. Blinn describes that its order processing module contains an order engine and an order pipeline. The order pipeline contains multiple stages which process the order. (col. 21, ll. 53-56).

13. Blinn describes that each stage has one or more components which process the key-value pairs in the order. There are three component categories: 1) a default component, 2) an optional component, and 3) a required component. (col. 21, l. 66-col. 22, l. 3).

14. Blinn describes that the optional components are typically customized for different types of sales transactions and replace the default components when installed. (col. 22, ll. 9-11).

PRINCIPLES OF LAW

Claim Interpretation

Analysis of claim rejections begins with a determination of claim scope. We determine claim scope not solely on the basis of claim language, but also on giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). *See also Superguide Corp. v. DirecTV Enter., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

Obviousness

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

ANALYSIS

*Claims 1-23 rejected under 35 U.S.C. § 103(a) as being obvious over
Danford-Klein and Blinn.*

*Independent claim 1*³

Appellant generally argues that the combination of Danford-Klein and Blinn fails to teach or suggest the step of providing a calculation scale comprising calculation ranges being either cumulative or non-cumulative and having an associated range start number, an optional currency attribute, which when present specifies the currency of the range start numbers, and an optional unit of measure attribute, which when present specifies the unit of measure for the range start numbers, as generally recited by independent claim 1. Specifically, Appellant argues that the combination does not teach or suggest “. . . provid[ing] for calculations in different currency denominations.” (App. Br. 6).

We are not persuaded by Appellant’s arguments and agree with the Examiner that Danford-Klein teaches rating engines designed to process different rate structures to create dynamic carrier contracts. (FF 3,4). In doing so, Danford-Klein teaches a calculation scale which uses rating engines containing actual price data used to calculate prices for linehaul service. (FF 4). These actual price data are made up of an index type, origin/destination type or band type, a unit of measure, and effective dates. (FF 5). Additionally, Danford-Klein describes that these rating engines results can be designated as independent or cumulative. (FF 7).

Further, with respect to Appellant’s argument regarding different currency denominations, while Appellant may be correct that Danford-Klein does not teach providing calculations in different currency denominations,

³ Appellant argues independent claims 1 and 10 together. We therefore select claim 1 as representative, and independent claim 10 stands or falls with claim 1. 37 C.F.R. § 41.37(c)(1)(vii).

Appellant's claims do not require this step. Accordingly, while claims are interpreted in light of Appellant's Specification, we will not read additional limitations appearing in the Specification into the present claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Thus, the combination of Danford-Klein and Blinn makes obvious the step of providing a calculation scale comprising calculation ranges being either cumulative or non-cumulative with at least both a currency attribute and a unit of measure attribute, as required by Appellant's independent claim 1. Therefore, Appellant's arguments are not persuasive as to the error in the rejection.

Additionally, Appellant argues that the combination of Danford-Klein and Blinn fails to teach or suggest the step of providing a calculation scale look up interface, a base monetary value, a result multiplier and a set of mathematical weights corresponding to the set of commerce objects, as generally recited in independent claim 1. Specifically, Appellant argues that "... the Examiner did not point to any place in the disclosure of Danford-Klein et al. where the limitations the result multiplier and the set of mathematical weights corresponding to the set of commerce objects are disclosed." (App. Br. 8). We are not persuaded by Appellant's arguments and find that Danford-Klein teaches data such as index type, origin/destination type or band type, unit of measure, and effective dates (FF 5), which we interpret to be obvious equivalents to the result multiplier as claimed by Appellant. (FF 8). Additionally, the Examiner's interpreted the shipping weight data used by the rating engines of Danford-Klein to correspond to a set of mathematical weights corresponding to the set of commerce objects, as claimed by Appellant. (Ans. 11, *see also* FF 4).

Specifically, the Examiner interpreted weight bands to be equivalent to “mathematical weights” based upon an embodiment in Appellant’s Specification which describes that the mathematical weights are shipping weights. (FF 1, 4). Contrary to Appellant’s contention that the Examiner has unreasonably interpreted the term “mathematical weights” based on only one embodiment disclosed in Appellant’s Specification (Reply Br. 3), we agree with the Examiner that it is reasonable and commensurate with the scope of Appellant’s Specification for shipping weight to read on the broad limitation “mathematical weights” as claimed by Appellant. We need not read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *Superguide Corp.* 358 F.3d at 875. Therefore, the combination of Danford-Klein and Blinn makes obvious the step of providing a calculation scale look up interface, a base monetary value, a result multiplier and a set of mathematical weights corresponding to the set of commerce objects, as recited by Appellant. Accordingly, Appellant’s arguments are not persuasive as to the error in the rejection.

Further, Appellant argues that the combination of Danford-Klein and Blinn fails to teach or suggest the step of providing a total result, the total result being provided by adding the multiplication product to a previously determined sum of multiplication products when the calculation range is cumulative and by replacing the previously determined multiplication product when the calculation range is non-cumulative, as generally recited in independent claim 1. (App. Br. 9-16). We are not persuaded by Appellant’s argument and find that Appellant’s are arguing the Danford-Klein and Blinn

references individually rather than for what the combination would suggest to one of ordinary skill in the art at the time of the invention.

Specifically, the Examiner found that the object-oriented rating system of Danford-Klein discloses additive and multiplier rating engines which add or multiply the results of the rating engines together. (FF 3, 8). Additionally, the Examiner cited the object-oriented merchandising system of Blinn to teach providing a total result. (FF 9, 12). In providing this total charge, which we interpret to be equivalent to Appellant's total result, Blinn computes the total charge for an order during the order total stage as the sum (i.e., adding) of the key-value pairs from the order engine and order pipeline. (FF 11, 12). Moreover, the order pipeline contains multiple stages which process the order based on one or more default components, optional components, and/or required components (FF 12, 13). Further, Blinn teaches that the optional components are typically customized for different types of sales transactions and replace the default components when installed. (FF 14).

Accordingly, we agree with the Examiner that the combination of Danford-Klein and Blinn makes obvious the step of providing a total result, the total result being provided by adding the multiplication product to a previously determined sum of multiplication products when the calculation range is cumulative and by replacing the previously determined multiplication product when the calculation range is non-cumulative. Accordingly, Appellant's arguments are not persuasive as to the error in the rejection.

Lastly, Appellant argues that there is no reason to combine Danford-Klein and Blinn and the Examiner has impermissibly done so. (App. Br. 16). To the extent Appellants seek an explicit suggestion or motivation in the reference itself, this is no longer the law in view of the Supreme Court's holding in *KSR Int'l Co.*, 550 U.S. 418. The Examiner has provided an articulated reasoning with rational underpinning for why a person with ordinary skill in the art would modify the object-oriented rating system of Danford-Klein which creates carrier contract using rating engines (FF 3) to incorporate the step of providing a total charge, as taught by the object-oriented merchandising system of Blinn. (FF 9, 12). Specifically, the Examiner articulates a rationale based on providing for, and obtaining a total when using a calculation scale framework along with calculation rules, unit of measurements and associated ranges. (Ans. 4). Thus, a person with ordinary skill in the art would know from Blinn to provide a total charge based on the sum of the order engine and order pipeline using the rating engines as disclosed by Danford-Klein (FF 4, 12) since both references are based on calculating costs using object-oriented programming. (FF 3, 9). Therefore, Appellants' arguments with regard to the combination of Danford-Klein and Blinn are not persuasive as to error in the rejection.

Dependent claims 2-9 and 11-23

Appellant does not separately argue claims 2-9 and 11-23 which depend from claims 1 and 10, respectively, and so has not shown that the Examiner erred in rejecting claims 2-9 and 11-23 under 35 U.S.C. § 103(a)

as obvious over Danford-Klein and Blinn for the same reasons we found as to claims 1 and 10, *supra*.

CONCLUSION OF LAW

We conclude that the Appellant not shown that the Examiner erred in rejecting claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Danford-Klein and Blinn.

NEW GROUNDS OF REJECTION

Pursuant to 37 C.F.R. § 41.50(b), we enter a new ground of rejection. We reject claims 1-23 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. We take claims 1 and 10 as representative.

The issues are whether the process of claim 1 and the computer program product of claim 10 are patent eligible under 35 U.S.C. §101.

With regard to the method, the claim recites steps and is thus nominally drawn to a process. However:

the proper inquiry under §101 is not whether the process claim recites sufficient ‘physical steps,’ but rather whether the claim meets the machine-or-transformation test. As a result, even a claim that recites ‘physical steps’ but neither recites a particular machine or apparatus, nor transforms any article into a different state or thing, is not drawn to patent-eligible subject matter. Conversely, a claim that purportedly lacks any ‘physical steps’ but is still tied to a machine or achieves an eligible transformation passes muster under § 101.

In re Bilski, 545 F.3d 943, 961 (Fed. Cir. 2008) (en banc).

Here, the claimed method is not tied to a machine nor does it transform a particular article into a different state or thing. Specifically,

Claim 1 recites a computer network in its preamble, but we find that this is not a meaningful recitation and does not recite a specific machine or apparatus as required. Additionally, while the last step of Appellant's claim may display a result, we find that this step is nothing more than post-solution activity. Further, the method of claim 1 does not transform a particular article into a different state or thing.

Therefore, we reject claims 1-9 under 35 U.S.C. § 101 as being drawn to nonpatentable subject matter.

Additionally claims 10-23 are rejected under 35 U.S.C. § 101 for being directed to nonstatutory subject matter. A claim directed to a signal (i.e., “[a] program data signal embodied in a carrier wave”) does not fit within at least one of the four statutory subject matter categories under 35 U.S.C. § 101. *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007).

Here, Appellant's computer program product comprises a recording medium which Appellant's Specification broadly defines as a “modulated carrier signal.” (FF 2). Additionally, Appellant's dependent claims 20-23 are explicitly directed to a signal. Thus, because the scope of the claims is such that they include subject matter not patent-eligible under §101, the claims must be rejected under §101 as covering nonstatutory subject matter.

Therefore, we reject claims 10-23 under 35 U.S.C. § 101 as being drawn to nonpatentable subject matter.

DECISION

We AFFIRM the rejection of claims 1-23 and we enter a new ground of rejection of claims 1-23 under 35 U.S.C. § 101.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should the Appellant elect to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the Appellant elects prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences

for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED
NEW GROUNDS OF REJECTION -37 C.F.R. § 41.50(b) (2008)

ack

cc:

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